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E-NOTES

United States Industry Coalition

USIC is a non-profit association of American companies and universities who are active partners in our nation's long-term nonproliferation efforts with the former Soviet Union.

In today's edition:

President's Report

VICTOR E. ALESSI
President & CEO

Despite depressing financial reports from all quarters, there is good news to share from USIC and the IPP program. Two USIC member companies, Argonide Corporation and Cyclotec Advanced Medical Technologies, Inc., are winners of the 2002 R&D 100 Award sponsored by *R&D Magazine*. This prestigious award is widely acknowledged as a harbinger of new technologies and products that go on to have an enormous impact on modern life. Argonide's nano-sized ceramic fibers and the novel miniaturized electro-therapeutic devices from Cyclotec are exciting new products for medicine and public health.

This month, IPP announced its expansion to the former Soviet republic of Armenia. Armenia is an extremely entrepreneurial nation, and I expect that it would fully support IPP operations. As information becomes available about opportunities in Armenia, it will be circulated to USIC members who may wish to consider new technology development in that nation. My own hope is that IPP and similar programs will continue to embrace other former republics of the Soviet Union. There are weapons of mass destruction scientists in each of these nations who need help and who could form the technical backbone for numerous peaceful commercial ventures.

In early June, NATO held a conference in Istanbul on commercializing science. The program was aimed at helping East European and former Soviet scientists funded under the NATO Science for Peace program to create new technical business ventures. While NATO does not provide matching funds for commercialization, the organization could be instrumental in creating new commercial ventures for USIC members. Again, whenever we believe a particular project merits attention as a potential source of new business, we will send word to our members.

With the addition earlier this year of Ali Demirci to our staff as Project Financing Specialist, USIC has begun providing assistance to small business members who are raising capital for projects ready for commercialization. Ali has been cultivating contacts in a number of capital-raising institutions, and we expect to formalize business relationships that will benefit USIC members.

So despite today's gloomy investment climate, I continue to believe that IPP projects are a genuine bargain for those who want to invest in the future. Unlike many failed companies of the past year or so, USIC members offer solid new technologies for which there are convincing business plans, growing markets and sometimes revolutionary applications. The very nature of the IPP program means that each project poses little scientific risk compared to alternative ventures — and each one has been scrubbed by the U.S. government in advance for any dual-use and export-control problems.

I therefore remain optimistic that USIC member companies will continue to succeed in commercializing their new products and services. We at USIC will do our utmost to make this a reality. Peace!

IPP Director's Report

JAMES R. NOBLE
IPP Director

John Rooney, who was my direct superior in his capacity as Associate Deputy Administrator for Nonproliferation and International Security, retired from Federal service at the end of last month. Many USIC members had close interaction with John on IPP matters, and many others knew of his enthusiastic support for the program and his creative approach to problem-solving and new ideas. On a personal basis, I have been privileged to serve under John, whom I have known through much of my Federal career and will miss him as a colleague and a friend.

While it is uncertain when or how the personnel vacancy will be filled, particularly regarding John's close interaction with the USIC community, I would like to assure USIC members of my personal commitment to be responsive to their concerns, their interests and their ideas. I will be supported in this pledge by the excellent IPP headquarters staff as well as the members of the Inter-Laboratory Board. The IPP program has strong support from Assistant Deputy Administrator Steven Black, to whom I now directly report, as well as from higher management in the National Nuclear Security Administration.

JOHN ROONEY

I intend to follow in John's tradition of positive and creative interaction with our industry partners. I look forward to this new phase in my relationship with USIC and its member firms, even as I will miss John's leadership and creative drive.

ILAB Chair's Report

DAVID A. EHST
ILAB Chair

The ILAB's efforts to streamline and reduce the time needed for the IPP proposal review process are beginning to bear fruit, chiefly with improvements in USIC/ILAB/DOE review procedures. We have implemented a plan to move proposals through parallel review by USIC and ILAB personnel, which can cut a month or more off the time schedule. ILAB is now sending two or three new proposals on a monthly basis to DOE, and the HQ staff has in many cases sped up the HQ and Interagency review — in the fastest cases, completing both reviews in one month.

Some difficulties remain with the ISTC/STCU and CRDF payment mechanisms, which are utilized to make the mandated tax-free payments to our NIS collaborators. Preparation of the budget and workplan for ISTC Partner Projects as well as identification of personnel and hourly pay-rates typically occupies several months on the part of our NIS project managers. Internal institute approvals and reviews by MinAtom consume more months. Finally the ISTC's own review process adds another two months or more.

CRDF has recently experienced tax-registration problems with the Russian Ministry of Industry, Science & Technology, which will affect both national lab subcontracts as well as the DOE/Master Contract procurement mechanism. Russian authorities are raising additional issues regarding the tax-exempt status of equipment transfers. Both problems are expected to slow the previously smooth-running CRDF procedures.

As a practical approach to these delays, we are encouraging the national labs and USIC member partners to consider launching the internal IPP project proposal process in parallel with the ISTC/STCU or CRDF procedures. In this manner, several organizations can exercise oversight and review of proposals simultaneously.

As we transition to a new ILAB chairmanship, under the capable leadership of Dr. Glen Dahlbacka of Lawrence Berkeley National Lab, USIC members should know that ILAB will continue to push for more efficient means of handling proposals and executing subcontracts with our NIS partners.

Two USIC Members Named Winners of 2002 R&D100 Awards

Cyclotec Advanced Medical Technologies, Inc. of Lauderhill, Fla. and **Argonide Corporation** of Sanford, Fla. are recipients of the prestigious 2002 R&D100 Awards sponsored by *R&D Magazine*, which selects the top 100 most technologically significant new products of the year.

"STIM-2002" is a series of revolutionary TENS devices developed by Cyclotec. TENS devices typically deliver low-level electrical impulses to relieve pain and stimulate healing. Cyclotec has created five miniature, wireless products that can be easily worn or applied directly to the body for treatment of chronic or acute pain.

(Click to view poster)

The company's first product, "CT1," is FDA-approved and ready for introduction as a major alternative to drugs and other palliative devices. Cyclotec expects its devices will expand the market in rehabilitation and sports medicine, home health and emergency care, as well as industrial medicine. The IPP partners on "STIM-2002" are **BioPhysical Laboratories** (Biofil) in Sarov, Russia and the **Lawrence Livermore National Laboratory**.

(Click to view poster)

Argonide Corporation has captured its second R&D100 Award in two years for a new nanotechnology product: NanoCeram™ nano alumina fibers. These alumina fibers, which are about the size of a DNA molecule, rapidly absorb dissolved heavy metals including mercury, gold, silver, cadmium, lead and uranium. When fashioned into filters, these fibers can provide filter-sterilized water from all microbiological pathogens including biological warfare weapons. Argonide expects to launch sales of filter discs for biotech and life science laboratory use by the 4th quarter of this year. Future versions will include cartridges for purifying water for point of use applications, such as home water filters.

Argonide is collaborating on NanoCeram™ with the **Design Technology Center** in Tomsk, Siberia, **VECTOR State Research Center of Virology and Biotechnology** in Novosibirsk, Siberia and the **National Renewable Energy Laboratory**.

The company also recently received a Phase II Small Business Innovative Research (SBIR) grant from NASA for its "NanoCeramic Sterilization Filter," which is based on NanoCeram™ fibers. This technology can be used in homeland defense as samplers in detectors of biological agents in air and water.

IPP Expands to Armenia

Armenian flag

Weapons scientists in the former Soviet republic of Armenia now join their colleagues in Russia, Ukraine and Kazakhstan as eligible partners for cost-sharing technology commercialization projects with U.S. industry partners through the IPP program.

Expansion to Armenia fits with the IPP program goal to extend the program over the next few years to selected additional countries. Armenia played a large role in Soviet science: although that country represented only one percent of the Soviet population, Armenian scientists were responsible for nearly one-third of Soviet science and technology, primarily in defense.

Kenneth Touryan, ILAB representative for the National Renewable Energy Laboratory and Peter Green, IPP Deputy Director, traveled to Armenia in June to meet with representatives of Armenian institutes and individuals at several private organizations.

"Our meetings focused on key technologies and facilities of interest," said Dr. Green. "The Armenian scientists are already used to working with the West, in terms of ISTC and CRDF grants, and they are keenly interested in working with IPP. "

According to Dr. Touryan, a handful of Armenian institutes are already involved with IPP projects as secondary partners to the lead Russian institute. This limited involvement has shown promising results and suggests great potential for future commercialization successes. He hopes to see up to three IPP projects launched in FY2003.

continued

Nearly 100 "pre-proposals" have been submitted to IPP from Armenian scientists in the areas of biotechnology/ medicine; materials; environment; lasers; computer modeling and communication; chemical sciences; and energy and instruments. USIC members are encouraged to review this list for potential technology partnerships.

The IPP program will work to attract members of the highly successful Armenian-American business community to assist in developing new projects.

Click to view lists of proposed Armenian projects

Secretary Abraham Announces 2nd Major Nonproliferation Effort with Kazakhstan

In his July 1 keynote address at a trade and investment conference sponsored by the Republic of Kazakhstan, Secretary of Energy Spencer Abraham announced the launch of a second major IPP project at the ULBA Metallurgical Plant. More than 150 scientists, engineers and technicians at ULBA, a former nuclear weapons facility, will work to expand and upgrade the plant's capacity for production of copper beryllium (CuBe) in cooperation with USIC members **Brush Wellman, Inc.** of Cleveland, Ohio and **RWE NUKEM, Inc.** of Danbury, Conn. The **Los Alamos National Laboratory** will provide technical assistance on this project.

(Click to view poster)

CuBe has many commercial applications, as it is a component of a range of products including small appliances, computers and telecommunication devices. The economic benefits of the project for ULBA are expected to reach over $10 million per year.

In January 2002, Secretary Abraham announced the first IPP project with ULBA: separation of low-enriched uranium from uranium concentrates, which can be used as a power source for civilian application throughout the world.

New Primary Members

Bahia 21 Corporation, based in Rockville, Md., was established in 2000 as a commercial start-up to promote high tech products in the U.S. and worldwide. It is a provider of a line of Human Protection products including explosive vapor detectors, metal and land mine detectors and other related security products, which are developed, designed and manufactured in Novosibirsk.

General Electric Company is recognized around the world for its products and services. Today, the company operates in 100 countries and employs more than 300,000 people. GE will join **Argonne National Laboratory** and the **Kurchatov Institute of Atomic Energy** in Moscow on a project to examine thermal efficiency, ownership costs and environmental acceptability of gas turbines with detonated combustion.

Ion Focus Technology (IFT), a Stony Brook, N.Y.-based company, is dedicated to the development of a new generation of ion beam instruments for medical treatment of tumors; analysis of environmental, medical and forensic science samples; landmine detection; and for vacuum equipment diagnostics. IFT is developing a proposal for a new cancer treatment technology with **Brookhaven National Laboratory** and the **All-Russian Scientific Research Institute of Automatics** in Moscow.

NorthWest Nuclear LLC (NWN), based in Lenoir City, Tenn., specializes in waste characterization systems that use x-ray-, gamma-ray- and neutron-based technologies to determine the physical and radiological characteristics of waste. Successful application of these techniques mitigates the need to obtain samples of the waste form to determine its characteristics. NWN has proposed to work with **Brookhaven National Laboratory** and **Chelyabinsk-70** in Snezhinsk on a technology that tracks items to which radio-frequency identity tags have been attached.

With facilities in Oxnard, Calif., **PVI** is a system engineering and manufacturing company specializing in high vacuum process equipment and technology. Since 1981, PVI has designed and manufactured a wide variety of automated vacuum processing systems for the flat panel display, semiconductor, aerospace, medical, high purity material, automotive and other demanding industries. The company is developing a project with **Brookhaven National Laboratory** and the **Bochvara Scientific Research Institute for Inorgamic Chemistry** in Seversk, Russia.

SciClone Pharmaceuticals, Inc., based in San Mateo, Calif., is a global specialty biopharmaceutical company that develops and commercializes novel medicines for treating a broad range of serious diseases including: Hepatitis C, Hepatitis B, Hepatocellular carcinoma, skin cancer and malignant melanoma, HIV, drug-resistant tuberculosis and cystic fibrosis. SciClone is working with **Oak Ridge National Laboratory** and the **Institute of Highly Pure BioPreparations** in St. Petersburg to develop a treatment for tuberculosis.

New Associate Member

Molycorp, Inc., headquartered in Brea, Calif., began operations in 1920 with a small underground molybdenum mine in Questa, N.M. Today, Molycorp produces and markets molybdenum and lanthanide (Rare earth) concentrates, oxides and compounds.

Returning Members

Eagle-Picher Technologies, LLC, based in Quapaw, Okla., is a division of Eagle-Picher Corporation. Since its founding in 1843 as a lead products company, Eagle-Picher Technologies has evolved into a multi-national conglomerate. The company participates in markets affecting nearly every facet of day-to-day life, including aerospace, nuclear, semiconductors, telecommunications, pharmaceuticals and Federal/Government programs. Together with **Argonne National Laboratory** and **Arzamas-16** in Sarov, Russia, Eagle Picher is working on borated materials and components for applications in nuclear shielding and waste containment.

LaSen, Inc. (short for Laser Sensors) is a Las Cruces, N.M.-based research and development company that has been pursuing mid-infrared lidar technology for over 12 years. The company has joined with **Oak Ridge National Laboratory** and **Moscow State University** to develop compact sensors for the detection of chemical and biological agents and explosives.

"New Era" Theme for USIC November Meeting

Expanding opportunities and growing successes through USIC-IPP commercial partnerships will be highlighted at the 7th Annual Meeting and Chairman's Reception on Thursday, November 14, 2002 in Washington, D.C. The Annual Meeting will be preceded by the USIC Members' Business Meeting, when elections to the board of directors will be held.

The Annual Meeting program will feature speeches and panel presentations by leaders in technology, international business, diplomacy and public policy. Program and registration information will be available in September.

The Annual Meeting will be held in the conference facilities of Shaw Pittman LLP, 2300 N Street, NW. The Chairman's Reception will take place at the Park Hyatt Hotel, 1201 24th Street NW. (Both locations are on the same city block, within walking distance of the Foggy Bottom Metro station.)

A limited number of rooms at the government rate have been reserved at the Park Hyatt Hotel. Call the hotel at 202-789-1234 for reservations; be sure to mention the "USIC Annual Meeting."

Other Upcoming Meetings

- November 1-3, 2002
  9th Annual CIS and Eastern Europe Business Forum
  University of Arizona, Tucson, Ariz.

View cover letter
View program

- November 12-14, 2002
  1st Russian-American Innovation Technologies Trade Show & Conference
  Philadelphia, Penna.
  Contact: Val Kogan, President, Mid-Atlantic-Russia Business Council, prbc@att.net

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